

Listing of the Claims

1. (Currently Amended) A method for the computer-assisted visualization of a three-dimensional anatomical object, comprising the following method steps:
 - a) recording two or more diagnostic image data records (1, 3, 4, 5)-of the object;
 - b) defining an imaging specification for imaging the image data (1, 3, 4, 5) onto a two-dimensional display plane-(8), wherein in order to define the imaging specification anatomical features (2)-of the object are identified in at least one of the image data records (1);
 - c) calculating a combined two-dimensional representation by imaging the two or more image data records (1, 3, 4, 5)-according to the previously defined imaging specification onto the common display plane-(8).
2. (Currently Amended) A method as claimed in claim 1, wherein in order to define the imaging specification an object volume (7)-delimited by a curved surface is determined in which the anatomical features (2)-of the object that are to be identified are contained.
3. (Currently Amended) A method as claimed in claim 2, wherein according to the imaging specification a projection of the image information of the data records (1, 3, 4, 5) that is contained in the object volume (7)-is calculated during the calculation of the two-dimensional representation.
4. (Currently Amended) A method as claimed in claim 3, wherein in order to calculate the two-dimensional representation Cartesian coordinates within the display plane (8)-are assigned to non-Cartesian surface coordinates (U, φ)-of the object volume-(7).
5. (Currently Amended) A method as claimed in any of claims 1-to-4, wherein at least one image data record comprises morphological image information of the anatomical object and at least one further image data record (3, 4, 5)-comprises functional image information relating to the anatomical object.

6. (Original) A method as claimed in claim 5, wherein the functional image information is obtained by evaluating temporal sequences of morphological image data of the anatomical object.

7. (Currently Amended) A method as claimed in ~~any of~~ claims 1 to 6, wherein at least one of the image data records (3, 4, 5)-comprises at least one slice image of the anatomical object.

8. (Currently Amended) A method as claimed in ~~any of~~ claims 1 to 7, wherein the image data records are recorded by means of computer tomography, magnetic resonance or ultrasound.

9. (Currently Amended) A method as claimed in ~~any of~~ claims 1 to 8, wherein the image data records are recorded using different imaging modes.

10. (Currently Amended) A diagnostic imaging device with recording means (18, 20)-for recording three-dimensional image data records of an anatomical object-(2), and with computer means (16, 21)-for visualizing the image data, wherein the computer means (16, 21)-have program control, by means of which a method as claimed in ~~any of~~ claims 1 to 9-can be carried out.

11. (Currently Amended) A computer program for a diagnostic imaging device, wherein a method as claimed in ~~any of~~ claims 1 to 9-is implemented by the computer program on the computer means (16, 21)-of the imaging device.